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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/846,464

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Kyung-Sik Kim

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EXAMINER

HOM, SHICK C

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/846,464	KIM ET AL.	
	Examiner	Art Unit	
	Shick C. Hom	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 3 and 4 lines 2-3, which recite "the case of a same frequency" and "the case of different frequencies" respectively, lack clear antecedent basis because no case of a same frequency nor case of different frequencies have been previously recited in the claims and therefore the limitation is not clearly understood.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Tiedemann, Jr. et al. (2001/0034233).

Regarding claim 1:

Tiedemann, Jr. et al. disclose a hard handoff method for making a mobile client continuously receive internet services by carrying out a hard handoff (see paragraph 0131 which recite the base stations participating in hard handoff), comprising the steps of: carrying out a handoff procedure with a target radio network upon encountering a hard handoff situation in the mobile client; carrying out a mobile IP registration procedure for the mobile client and for the target packet data service node of the target radio network without closing the current traffic links; and shifting a traffic channel of the mobile client to the target packet data service node from a current packet data service node after setting all links (see paragraph 0006 which recite the mobile units communicating with the base station for routing packets to the Internet, paragraph 0144 which recite the

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step of call registration, paragraphs 0010-0011 which recite the step of deciding whether to establish communication between the new base station, whereby active communication have been established, and the mobile unit and handoff without termination of communication through the first station, and paragraph 0138 which recite the step of assigning traffic channel to the mobile unit via the handoff table upon entering from a neighboring base station or switching from another frequency clearly reads on shifting the traffic channel as claimed).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

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Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann, Jr. et al. (2001/0034233) in view of Ahmed et al. (6,256,300).

For claims 2-4, Tiedemann et al. disclose the method described in paragraph 4 of this office action. Tiedemann et al. disclose all the subject matter of the claimed invention with the exception of wherein the mobile client carries out a setting of independent multiple PPP Point-to-Point Protocol PPP links and their control functions as in claim 2; wherein in setting the multiple PPP links, a channel allocation is carried out in the case of a same frequency as in claim 3; and wherein in setting the multiple PPP links, a frequency allocation and a channel allocation are carried out in the case of different frequencies as in claim 4.

Ahmed et al. from the same or similar fields of endeavor teach that it is known to provide the step wherein the mobile

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client carries out a setting of independent multiple PPP Point-to-Point Protocol PPP) links and their control functions (see col. 6 line 56 to col. 7 line 10 which recite a network node acting as a switch connecting using point-to-point wireless links the mobiles to the network node serving as a base station clearly reads on providing setting of independent multiple ppp links by the mobile client as it is handed-off to a different network node as in claim 2); wherein in setting the multiple PPP links, a channel allocation is carried out in the case of a same frequency; and wherein in setting the multiple PPP links, a frequency allocation and a channel allocation are carried out in the case of different frequencies (see col. 8 lines 6-42 which recite the ppp links including the wireless access segment having a TDMA/FDM scheme which uses different frequency bands to minimize interference and uses TDMA to create multiple channels as in claims 3-4). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide wherein the mobile client carries out a setting of independent multiple PPP Point-to-Point Protocol PPP) links and their control functions; wherein in setting the multiple PPP links, a channel allocation is carried out in the case of a same frequency; and wherein in setting the multiple PPP links, a frequency allocation and a channel

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allocation are carried out in the case of different frequencies as taught by Ahmed et al. in the communications handoff method of Tiedemann, Jr. et al.

The step wherein the mobile client carries out a setting of independent multiple PPP Point-to-Point Protocol PPP) links and their control functions; wherein in setting the multiple PPP links, a channel allocation is carried out in the case of a same frequency; and wherein in setting the multiple PPP links, a frequency allocation and a channel allocation are carried out in the case of different frequencies can be implemented by using the PPP links and the TDMA/FDM scheme of Ahmed et al. in connecting the mobile clients to the base station of Tiedemann Jr. et al. The motivation for using the PPP links and the TDMA/FDM scheme as taught by Tiedemann, Jr. et al. in the communications handoff method of Tiedemann, Jr. et al. being that it provides more efficiency for the system since the system is provided with a high quality and efficient point-to-point link and TDMA/FDM scheme between the mobile client and the base station for mobility management.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Rai et al. disclose an efficient mobility management scheme for a wireless Internet access system.

Ton discloses a method for ensuring reliable mobile IP service.

Cao discloses a transmission control protocol handoff notification system and method.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH


DANG TON
PRIMARY EXAMINER